

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings of claims in the application:

**Listing of Claims:**

20. (Currently amended) In a video data processing apparatus including a controller coupled to a memory circuit that has a plurality of arrays wherein adjoining ones of the plurality of arrays share clusters of sense amplifiers with each other, a method for storing video data in the memory circuit comprising the steps of:

segmenting a plurality of pixels representing one horizontal line of an image display panel into a plurality of pixel groups; and

storing data representing each of said plurality of pixel groups, respectively, in a row of a plurality of non-adjoining arrays in the memory circuit.

21. (Previously presented) The method of claim 20 further comprising the steps of:

defining tiles of pixels by a two-dimensional grouping of the plurality of pixel groups from a plurality of horizontal lines of the display panel; and

storing data representing each tile of pixels substantially entirely in non-adjoining arrays in the memory circuit.

22. (Previously presented) The method of claim 21 wherein the data representing each of said plurality of pixel groups is respectively stored in the same row of the plurality of non-adjoining arrays.

23. (Previously presented) The method of claim 22 wherein the data representing each tile of pixels is respectively stored in consecutive rows of the plurality of non-adjoining arrays.

24. (Previously presented) The method of claim 23 further comprising the steps of:

dividing the display panel into a first half and a second half;  
storing pixel data from the first half of the panel in odd numbered arrays in the memory circuit; and

storing pixel data from the second half of the panel in even numbered arrays in the memory circuit.

25. (Currently amended) In a video data processing apparatus including a controller coupled to a memory circuit that has a plurality of arrays wherein each odd numbered one of the plurality of arrays shares a cluster of sense amplifiers with an even numbered one of the plurality of arrays, a method for storing video data in the memory circuit comprising the steps of:

dividing the display panel into a first half and a second half;  
storing pixel data from the first half of the panel in odd numbered arrays in the memory circuit; and

storing pixel data from the second half of the panel in even numbered arrays in the memory circuit.